



Receipt Date: 09/26/2007

10591722 - GAU: 1626

PTO/SB/08A (09-06)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/591,722
				Filing Date	
				First Named Inventor	Atsushi SAITOU
				Group Art Unit	
				Examiner Name	
Sheet	1	of	4	Attorney Docket Number	MOEG-P100

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number- Kind Code ² (if known)			
		US-5,086,069	02-04-1992	Klein et al.	
		US-5,633,231	05-27-1997	Habich et al.	
		US-5,886,044	03-23-1999	Widdowson et al.	
		US-6,096,773	08-01-2000	Scott et al.	
		US-6,204,294 B1	03-20-2001	Bryan et al.	
		US-6,750,348 B1	06-15-2004	Bridger et al.	
		US-7,091,217 B2	08-15-2006	Bridger et al.	
		US-7,098,215	08-29-2006	Yamazaki et al.	
		US-7,176,227	02-13-2007	Yamazaki et al.	
		US-2004/0157818 A1	08-12-2004	Yanaka et al.	
		US-2004/0254221 A1	12-16-2004	Yamazaki et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number-Kind Code ⁴ (if known)				
		EP	0 183 271 A2	06-04-1986	Showa Denko K.K.		
		EP	0 628 551	12-14-1994	Shionogi & Co., Ltd.		
		EP	0 646 598	04-05-1995	Bayer AG		✓*
		JP	7-89988	04-04-1995	Bayer AG		✓*
		WO	98/006397 A1	02-19-1998	Smith Kline Becham		
		WO	99/033787 A1	07-08-1999	Kureha Corporation		✓*
		WO	00/056729 A1	09-28-2000	Anormed Inc.		
		WO	00/006086 A2	02-10-2000	Trustees of Columbia University in City of NY		
		WO	01/010842 A2	02-15-2001	Millennium Pharmaceuticals, Inc.		
		WO	01/079168 A1	10-25-2001	Kureha Chemical Industry Co., Ltd.		✓*

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Abstract Only

(Filed 09/25/07)

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.S./

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/591,722
				Filing Date	
				First Named Inventor	Atsushi SAITOU
				Group Art Unit	
				Examiner Name	
Sheet	2	of	4	Attorney Docket Number	MOEG-P100

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number- Kind Code ² (if known)			
		US 2004/0171638 A1	09-02-2004	Bridger et al.	
		US-2005/0165063 A1	07-28-2005	Yamazaki et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number-Kind Code ⁵ (if known)					
		WO	02/022600 A1	03-21-2002	Anormed Inc.		
		WO	02/094261 A1	05-20-2002	Kureha Chemical Industry Co., Ltd.		✓*
		WO	03/029218 A1	04-10-2003	Kureha Chemical Industry Co., Ltd.		✓*
		WO	04/024697 A1	03-25-2004	Kureha Chemical Industry Co., Ltd.		✓*

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Abstract Only

(Filed 09/25/07)

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.S./

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/591,722
				Filing Date	
				First Named Inventor	Atsushi SAITOU
				Group Art Unit	
				Examiner Name	
Sheet	3	of	4	Attorney Docket Number	MOEG-P100

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		MOLINO, M. et al., "CXCR4 on human endothelial cells can serve as both a mediator of biological responses and as a receptor for HIV-2," Biochimica et Biophysica Acta (BBA), Molecular Basis of Disease, vol. 1500, pp 227-240 (2000)	
		<u>Saishin Igaku</u> , Vol. 53, No. 9, pp. 2031-2038 (1998) with English translation of abstract	
		Nikkei Science, Oct., p. 26-37 (1998) with English version Bartlett, John G. et al, "Improving HIV Therapy," Scientific American, pp 84-89 (July 1998)	
		<u>Molecular Medicine</u> , Vol. 36, No. 9, pp. 1012-1017 (1999) with English translation of abstract	
		<u>Nikkei Science</u> , Oct., pp. 42-49 (1998) with English version Baltimore, David et al, "HIV Vaccines: Prospects and Challenges," Scientific American, pp 78-83 (July 1998)	
		Feng, Yu et al, "HIV-1 Entry Cofactor: Functional cDNA Cloning of a Seven-Transmembrane, G Protein-Coupled Receptor," Science, 272, 872-877 (1996)	
		Bleul, Conrad C. et al, "The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry," Nature, 382, 829 -831 (1996)	
		Schols, Dominique et al, "Inhibition of T-tropic HIV Strains by Selective Antagonization of the Chemokine Receptor CXCR4," J. Exp. Med., 186, 1383 - 1387 (1997)	

Examiner Signature		Date Considered	
-------------------------------	--	----------------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Receipt date: 09/26/2007

10591722 CAU-1626

Approved for use through 03/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/591,722	
			Filing Date		
			First Named Inventor	Atsushi SAITOU	
			Group Art Unit		
Examiner Name					
Attorney Docket Number	MOEG-P100				
Sheet	4	of	4		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Murakami, Tsutomu et al, "A Small Molecule CXCR4 Inhibitor that Blocks T Cell Line-tropic HIV-1 Infection," J. Exp. Med., 186, 1389 - 1393 (1997)	
		Doranz, Benjamin J. et al, "A Small-molecule Inhibitor Directed against the Chemokine Receptor CXCR4 Prevents its Use as an HIV-1 Coreceptor," J. Exp. Med., 186, 1395 - 1400 (1997)	
		Muller, Anja et al, "Involvement of chemokine receptors in breast cancer metastasis," Nature, 410, 50-56 (2001)	

Examiner Signature	/Samantha Shterengarts/	Date Considered	08/26/2009
---------------------------	-------------------------	------------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Abstract Only ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH: (Form 09/25/07) /S.S./